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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/903,024	07/11/2001	James Morgan Murphy	SEA9783/30874.108USU1	9848

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EXAMINER	
MAGEE, CHRISTOPHER R	
ART UNIT	**PAPER NUMBER**
2627	

DATE MAILED: 05/02/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/903,024	MURPHY, JAMES MORGAN	
	Examiner	Art Unit	
	Christopher R. Magee	2627	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *01 February 2006*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-7 and 9-27* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) *1-7,9-12 and 19-27* is/are allowed.

6)☒ Claim(s) *13,14 and 17* is/are rejected.

7)☒ Claim(s) *15,16 and 18* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *01 February 2006* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

1. The reply filed 02/01/2006 was applied to the following effect:

Drawings

2. The drawings (Figure 8) were received on 02/01/2006. These drawings are acceptable.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

- Claims 13, 14 and 17 are rejected under 35 U.S.C. 102(e) as being anticipated by Berding et al. (hereinafter Berding) (US 6,307,715 B1).

Regarding claim 13, Berding shows suspension member 68 comprising:

a plate 82 extending in a first plane, the plate having a width centered about a longitudinal axis of the plate (Figure 3); and

first and second rails 88, 90 formed from material of the plate and each having a width extending in a direction transverse to the longitudinal axis of the plate, the first and second rails being bent out of the first plane and being spaced apart in the longitudinal direction, the first rail

having a length extending in a second plane and the second rail having a length extending in a third plane, the second and third planes being different than the first plane,

wherein a portion of the plate extending in the first plane connects the first and second rails together to form an open channel having a generally U-shaped cross section, and in combination a portion of the first and second rails extend across all of the bend section width (see annotated Figure 4).

Regarding claim 14, Berding shows the second and third planes are perpendicular to the first plane (Fig. 4).

Regarding claim 17, Berding shows the second and third planes extend at different angles from the first plane (Fig. 4).

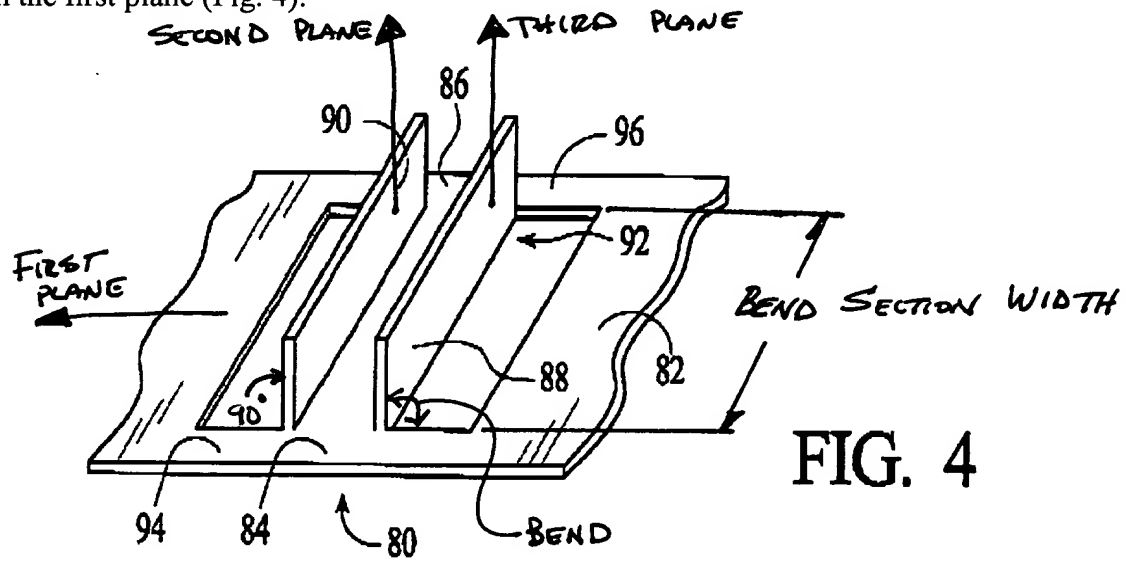

FIG. 4

Response to Arguments

4. Applicant's arguments filed 02/01/2006 with respect to claim 13 has been fully considered but is not persuasive.

Moreover, the Applicant asserts on pages 13-14 of the filed response dated 02/01/2006:

> *"Although the flaps 88, 90 span much of the width of the hinge region 80, as shown in Figure 4, neither of the flaps individually or in combination extend across uncut regions 84, 86. Therefore, Berding fails to disclose 'in combination a portion of the first and second rails extend across substantially all of the bend section width' as required by claim 13."*

Berding '715 shows "in combination a portion of the first and second rails extend across all of the bend section width" as indicated in the annotated Figure 4. Therefore, the Examiner maintains the rejection of claim 13.

Allowable Subject Matter

5. Claims 15, 16 and 18 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

6. Claims 1-7, 9-12 and 19-27 are allowed.

The following is an examiner's statement of reasons for allowance:

- **Claim 1** specifies a head suspension which requires:

> *"the open channel being positioned in the load path such that the forces transmitted between the base and the load beam pass through the open channel in their entirety."*

Berding et al. (US 6,307,715 B1) disclose a hinge region 80 having a torsional stiffening brace 92 as shown in Figure 4. The flaps 88, 90 are formed from the bend section material. Berding '715 teaches the load forces applied at one side of the hinge region circumvent the stiff brace 92 by traveling along the uncut regions 82, 84. Berding '715 does not teach or suggest the open channel being positioned in the load path such that the forces transmitted between the base and the load beam pass through the open channel in their entirety as claimed in the present invention.

Therefore, these features, in combination with other features of claim 1, are not anticipated by, nor made obvious over, the closest prior art of record of Berding et al. (US 6,307,715 B1).

- **Claim 19** specifies a head suspension which requires:

  "whereby the rail includes at least two segments along the rail width and the base of the load beam is coupled to the bend section between two of the rail segments."

Berding et al. (US 6,307,715 B1) disclose in Figure 4 the flaps 88, 90 span much of the width of the hinge region 80 but neither of the flaps individually or in combination extend across uncut regions 84, 86. Therefore, Berding '715 does not teach or suggest whereby the rail includes at least two segments along the rail width and the base of the load beam is coupled to the bend section between two of the rail segments as claimed in the present invention.

Therefore, these features, in combination with other features of claim 19, are not anticipated by, nor made obvious over, the closest prior art of record of Berding et al. (US 6,307,715 B1).

- **Claim 20** specifies a suspension member which requires:

  "whereby the base or the load beam is attached to the stiffening means within the width of the first or second rail."

Berding '715 teaches the load forces applied at one side of the hinge region circumvent the stiff brace 92 by traveling along the uncut regions 82, 84. Therefore, Berding '715 does not teach or suggest whereby the base or the load beam is attached to the stiffening means within the width of the first or second rail as claimed in the present invention.

Therefore, these features, in combination with other features of claim 20, are not anticipated by, nor made obvious over, the closest prior art of record of Berding et al. (US 6,307,715 B1).

- **Claim 21** specifies a head suspension which requires:

  "the rail includes at least two separate segments along the rail width."

Hanrahan '252 shows a rail 66 that extends along a transverse axis, which is perpendicular to a longitudinal axis of the beam. Hanrahan does not teach or suggest separating the rail into at least two separate segments as claimed in the present invention.

Allen '381 exhibits a bend section 137 comprises first 343 and second 344 rails being separated in the longitudinal axis direction of the bend section 137, the rails forming an open channel (Figure 9). Neither rails 343 or 344 are split into two distinct segments.

Last, Murakami '044 shows a one-piece rail (not numbered) that extends the transverse axis that is perpendicular to the beam longitudinal axis. Murakami does not teach or suggest separating the rail into at least two separate segments as claimed in the present invention.

Therefore, these features, in combination with other features of claim 21, are not anticipated by, nor made obvious over, the closest prior art of record of Hanrahan (US 5,870,252), Allen et al. (US 5,894,381) and/or Murakami et al. (US 6,212,044 B1).

- **Claim 22** specifies a head suspension which requires:

  "the open channel being positioned in the load path such that the forces transmitted between the base and the load beam pass through the open channel in their entirety."

Berding et al. (US 6,307,715 B1) disclose a hinge region 80 having a torsional stiffening brace 92 as shown in Figure 4. The flaps 88, 90 are formed from the bend section material. Berding '715 teaches the load forces applied at one side of the hinge region circumvent the stiff brace 92 by traveling along the uncut regions 82, 84. Berding '715 does not teach or suggest the open channel being positioned in the load path such that the forces transmitted between the base and the load beam pass through the open channel in their entirety as claimed in the present invention.

Therefore, these features, in combination with other features of claim 22, are not anticipated by, nor made obvious over, the closest prior art of record of Berding et al. (US 6,307,715 B1).

- **Claim 26** specifies a suspension member bend section which requires:

  "whereby the plate is configured for mounting to the load beam or the suspension member within the width of the rail.."

Murakami '044 shows a one-piece rail (not numbered) that extends the transverse axis that is perpendicular to the beam longitudinal axis. Murakami does not teach or suggest separating the rail into at least two separate segments as claimed in the present invention.

Berding et al. (US 6,307,715 B1) disclose a hinge region 80 having a torsional stiffening brace 92 as shown in Figure 4. The flaps 88, 90 are formed from the bend section material. Berding '715 teaches the load forces applied at one side of the hinge region circumvent the stiff brace 92 by traveling along the uncut regions 82, 84. Berding '715 does not teach or suggest a plate being configured for mounting to the load beam or the suspension member within the width of the rail as claimed in the present invention.

Therefore, these features, in combination with other features of claim 26, are not anticipated by, nor made obvious over, the closest prior art of record of Murakami et al. (US 6,212,044 B1) and/or Berding et al. (US 6,307,715 B1).

Conclusion

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

8. PLEASE NOTE the recent change in art unit designation from art unit 2653 to art unit 2627.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher R. Magee whose telephone number is (571) 272-7592. The examiner can normally be reached on M-F, 8: 00 am-4: 30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrea Wellington can be reached on (571) 272-4483. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Christopher R. Magee
Patent Examiner
Art Unit 2627

April 27, 2006
crm

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